



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/477,570 01/06/00 KNABENBAURER

D AUS990884US1

EXAMINER

WM01/1023

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NGUYEN, K
ART UNIT PAPER NUMBER

2674
DATE MAILED:

10/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/477,570

Applicant(s)

KNABENBAURER, DANIEL J.

Examiner

Kevin M. Nguyen

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on 4/27/2000. These drawings are acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-26 and 28-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrold (US 6,281,861).
4. As to claims 1 and 24, Harrold teaches 3D display which includes a matrix of the triangle 6 and 7 representing RGB pixels matrix (see col. 5, lines 16-19), the RGB pixels matrix are controlled by the circuit 25 (see col. 6, lines 24-25). It would have been obvious to a person of ordinary skill in the art to recognize that Harrold discloses the modular may also be embodied in light emitting technology with each picture elements having a light emitting element as claimed (see col. 3, lines 19-21).
5. As to claims 2 and 4-18, Harrold teaches 3D display which includes the array 20 comprising RGB light-emitting pixels (see col. 6, lines 47-50). It would have been obvious to a person of ordinary skill in the art to recognize that Harrold discloses a red light emitting element, a green light emitting element, and a blue light emitting element as claimed.

6. As to claims 19-23, Harrold teaches a circuit 25 may comprise a computer (see col. 6, lines 24-30).

As to claim 25, Harrold teaches 3D display which includes a matrix of the triangle 6 and 7 representing RGB pixels matrix (see col. 5, lines 16-19), the RGB pixels matrix are controlled by the circuit 25 (see col. 6, lines 24-25). It would have been obvious to a person of ordinary skill in the art to recognize that Harrold discloses the modular may also be embodied in light emitting technology with each picture elements having a light emitting element as claimed (see col. 3, lines 19-21).

As to claims 26 and 28-49, Harrold teaches 3D display which includes the array 20 comprising RGB light-emitting pixels (see col. 6, lines 47-50). It would have been obvious to a person of ordinary skill in the art to recognize that Harrold discloses a red light emitting element, a green light emitting element, and a blue light emitting element as claimed.

7. Claims 3 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrold in view of Farnworth et al (US 5,986,409).

As to claims 3 and 27, Harrold teaches all of the claimed limitations of claims 1 and 2, except for "a red light emitting element, a green light emitting element, and a blue light emitting element are each comprised a cell having an anode, a cathode, a gas volume and a phosphorus material." However, Farnworth teaches a plasma display of electrons and ions (see col. 2, line 10) which includes the color pixels having a color cell 330R, 330B, 330G a gas discharge, phosphors (see col. 7, lines 55-65), a cold cathode field emission display, anode the display screen (see col. 1, lines 51-54). It

would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a trio of color pixel 330 taught by Farnworth in the light emissive display of Harrold's system because of retaining high resolution images and requisite thinness of the FED (see col. 1, lines 62-63 of Farnworth).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 form.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on M-F (9:00-5:00), with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe** can be reached on **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

Application/Control Number: 09/477,570
Art Unit: 2674

Page 5

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen
Examiner
Art Unit 2674

KN
October 19, 2001



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600